Selection of Sponsor
Sponsor Biosketch
Sponsor’s statement
Letters of Recommendation

Who are key personnel
• Principal investigator
• Sponsor/co-sponsor
• Consultant/ collaborator
Build a Strong Research Team

**Select a sponsor/ co-sponsor**
- Active investigator in the area
- Commitment to your training
- Substantial research support
- Documented mentoring success
- (Co-sponsor complementary expertise)

Describe why selected & how enhance training goals
- current position
- research focus
- training history
- collaborative partnership
- How sponsor/co-sponsor interact for you

What’s your plan?
Sponsors and Trainees

**Sponsors**
- Advisors and role models
- Relevant instruction
- Appropriate supervision
- Pass along information
- Guidance on career development
- Advocacy for trainees’ next step

**Trainees**
- Ask questions; seek advice
- Learn and obtain understanding
- Perform research projects
- Offer perspectives
- Determine career goals
- Proactively plan next steps

Behrous Davani, NCI, July 19, 2017
Key Personnel’s Biosketch
(sponsor, co-sponsor, collaborators)

Sections:
• Personal Statement tailored to you
• Contributions to Science
• Research Support
• Track Record of Mentoring-make sure they add!
Sponsor & Co-Sponsor Statements - Training Plan

Research Support Available (table)
Previous trainees (table, 5 examples)
Training Plan, environment, research facilities
Number of fellows to be supervised during fellowship
Applicant’s qualifications & potential for research career

Sponsor’s Personal statement (example)

- The proposed research involves….. I have expertise in all of these areas, including…., a long history investigating…., experience with…., and formative work in…. My work in this area began in…. I currently direct the…lab which is devoted to these themes. I have successfully administered major grants in this area and currently serve as PI or Co-I on multiple NIH grants using…. I have a strong track record of mentorship and co-mentorship of graduate students including NRSAs. Currently I mentor (number) graduate students and (number) post-doctoral fellows, of whom (number) have NRSAs. My students have regularly transitioned to prestigious post-doctoral and faculty appointments. I have and can provide the necessary resources to support (name)’s training goals.

(add training hx)

research interests, current position, research support, mentoring record, etc.
Sponsor Plan Structure

A. Research Support Available
In a table, list all current and pending research and research training support specifically available to the applicant.

B. Sponsor's/Co-Sponsor's Previous Fellows/Trainees
In a table, State the total number of predoctoral and postdoctoral individuals previously sponsored. Select up to five that are representative.

C. Training Plan, Environment, Research Facilities
The applicant's Research Training Plan should be individualized for the applicant...(1-2 pages)

D. Number of Fellows/Trainees to be Supervised During the Fellowship
Indicate how many pre- and/or post- doctoral fellows/trainees the Sponsor/Co-sponsor is expected to supervise.

E. Applicant's Qualifications and Potential for a Research Career
Describe how the fellowship applicant is suited for this research training opportunity based on his/her academic record and research (up to 1 page)
A. Research Support Available

<table>
<thead>
<tr>
<th>Grant Source</th>
<th>ID Number</th>
<th>Title</th>
<th>PI</th>
<th>Dates</th>
<th>Annual Direct Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>NIH; NIAID</td>
<td>R01AI</td>
<td>Developing Pathogen Recognition Receptor Agonists as Latency Reversing Agents</td>
<td></td>
<td>12/08/16-06/30/21</td>
<td>$250,000</td>
</tr>
<tr>
<td>NIH; NIAID</td>
<td>R21/R33AI</td>
<td>A family of compounds that reactivate latent HIV without T cell activation</td>
<td></td>
<td>09/19/14-08/31/19</td>
<td>$296,028</td>
</tr>
<tr>
<td>NIH; NIAID</td>
<td>5UM1AI</td>
<td>Bench to Bed Enhanced Lymphocyte Infusions to Viral (\text{Co-Investigator})</td>
<td></td>
<td>7/1/16-6/30/21</td>
<td>$24,692</td>
</tr>
</tbody>
</table>

https://reporter.nih.gov/
B. Sponsor's/Co-Sponsor's Previous Fellows/Trainees

State the total number of predoctoral and postdoctoral individuals previously sponsored. Select up to five that are representative

<table>
<thead>
<tr>
<th>Name</th>
<th>Pre/Post Doc</th>
<th>Training Dates</th>
<th>Funding Source/Grant #</th>
<th>Dissertation/Project Title</th>
<th>Current Employment Title/Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre</td>
<td>2003-2006</td>
<td>NIH/NINR F31NR008314</td>
<td>Korean immigrants' life with type 2 diabetes and hypertension</td>
<td>Chief Nursing Officer/ Mary's Center for Maternal and Child Care, Inc. Washington, DC</td>
</tr>
<tr>
<td></td>
<td>Pre</td>
<td>2006-2012</td>
<td>NIH/NINR F31NR010992</td>
<td>Measuring health literacy in Vietnamese patients with hypertension</td>
<td>Assistant Professor/ Boston College Connell School of Nursing Boston, MA</td>
</tr>
<tr>
<td></td>
<td>Pre</td>
<td>2007-2011</td>
<td>China Medical Board</td>
<td>Self-care in patients with type 2 diabetes</td>
<td>Assistant Professor/ China Medical University School of Nursing Shenyang, China</td>
</tr>
<tr>
<td></td>
<td>Pre</td>
<td>2010-2015</td>
<td>NIH/NINR F31NR014750</td>
<td>Self-care decision making in patients with heart failure</td>
<td>Post-Doctoral Fellow/ University of Utah School of Nursing</td>
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<tr>
<td></td>
<td>Pre</td>
<td>2011-2015</td>
<td>STTI Small Grant-National Award/ Fahs-Beck Research Grant</td>
<td>Cervical cancer screening related decision making among Korean American women</td>
<td>Assistant Professor/ University of Connecticut School of Nursing Storrs, CT</td>
</tr>
</tbody>
</table>
If junior investigator, select co-mentor with training history

PREVIOUS FELLOWS/TRAINEES

Sponsor: [Redacted]

Number of previous predoctoral trainees - 0
Number of previous postdoctoral trainees - 2

[Redacted] is my first PhD graduate student, and thus we have identified an experienced co-mentor. As a Research Assistant Professor, I co-mentored [Redacted], a graduate student in the laboratory of Dr. [Redacted]. In that role, I met with her monthly, participated in her thesis committee meetings, and spent countless hours in research advising. Her graduate studies led to 6 publications, including a first author publication in Retrovirology, and co-authorship in PNAS, Cell Reports and JCI Insight, among other. After her PhD, she went on to a postdoctoral fellowship at the University of Utah in the laboratory of Dr. [Redacted] have hosted 2 Postdocs, 10 undergraduates in the lab, 3 medical students, and value the individualized research goals for each trainee. In spite of my limited experience mentoring graduate students and postdoctoral fellows, I was awarded the 2018 Best Mentor Award by the [Redacted] and I am passionate about mentoring. To enhance my own mentoring abilities, I recently completed a Masters in Business Administration in which several classes were directed towards improving my managerial skills. I am also a co-Graduate Program Director for the Microbiology & Immunology PhD program, and meet monthly with other program leaders to discuss program development and any emerging issues. These skills, in addition to my research acumen will be of high value in training [Redacted] and others in my laboratory.

Co-Sponsor: [Redacted]

Number of previous predoctoral trainees - 9
Number of previous postdoctoral trainees - 10
F31 training review criteria

It is expected that the mentored research training experience will provide:
• A strong foundation in research design, methods & analytic techniques appropriate to the proposed dissertation research;
• The enhancement of the applicant's ability to conceptualize and think through research problems with increasing independence;
• Experience conducting research using appropriate, state-of-the-art methods, as well as presenting and publishing the research findings as first author;
• The opportunity to interact with members of the scientific community at appropriate scientific meetings and workshops;
• Skills needed to transition to the next stage of the applicant's research career;
• The opportunity to enhance the applicant's understanding of the health-related sciences and relationship of the proposed research to health and disease.
Address Research Competencies

- Discipline-specific conceptual knowledge and critical thinking
  
  *Ex. coursework, qualifier exam, journal club, clinical experience*

- Research skill development including computational skills and data management
  
  *Ex. Core facility workshops, lab experience, biostatistics*

- Communication skills, oral, written and lay public
  
  *Ex. career courses, journal club, meetings*

- Professionalism, respect, reflect values of workplace and profession
  
  *Ex. Outreach, service, promote discipline, journal club, authorship*

- Leadership, management and team science skills, including collaboration
  
  *Ex. Collaborations, overseeing students*

- Ethics and responsible conduct of research
  
  *Ex. Coursework, lab interactions, IACUC, IRB, manage conflict of interest*

*Discuss examples*
C. Training Plan, Environment, Facilities

3. Training Plan, Environment, Research Facilities

The laboratories of Robert Fischer (sponsor) and Daniel Zilberman (co-sponsor) will provide Christian Ibarra with an excellent research environment. The primary research goal of Robert Fischer’s lab is to understand how DNA demethylation controls gene imprinting and endosperm development. Since 2002, his lab has published ten manuscripts (2 in Cell, 2 in Science, Developmental Cell, 2 in PNAS, Plant Cell, 2 in Plant Physiology) and five invited reviews on imprinting and chromatin dynamics. Christian Ibarra also interacts with Daniel Zilberman, whose research goal is to understand the regulation of transcription within the context of chromatin, which is influenced by transcription factors, nucleosomes, chromatin remodelers, histone variants and modifications, and DNA methylation. Daniel Zilberman has an excellent publication record, and has published 6 outstanding papers (Nature, Science, 2 in Nature Genetics, PNAS, Development) in the past 3 years. Robert Fischer and Daniel Zilberman will provide the necessary equipment, biological materials, supplies and training expertise to help Christian Ibarra achieve his research and career goals. Robert Fischer will provide mentoring on gene imprinting and endosperm development, whereas Daniel Zilberman will provide mentoring in chromatin biology and the analysis of genome-wide data sets. This collaboration is already well underway, and has resulted in a co-first author publication for Christian Ibarra (Genome-wide demethylation of Arabidopsis endosperm, Science, 324: 1451-1454 (2009)), as well as an NSF grant to study gene imprinting networks in Arabidopsis.

UC Berkeley provides a highly stimulating academic environment for pre-Ibarra will take classes to enhance his understanding of genetics and ge240, Advanced Genetic Analysis; MCB/PB C246, Topics in Computation. Also, the Molecular and Cell Biology Department, Plant Biology Departm in Computational and Genomic Biology sponsor seminars in the fields of computational biology.

The research program proposed by Christian Ibarra will complement his molecular biology and extend his understanding of epigenetic mechanisms imprinting and chromosome architecture. He will have an opportunity to genome-wide DNA sequencing platforms, microarray technology, software used to study DNA methylation. These approaches will allow him to test his demethylation controls gene imprinting. He will be working with scientists network disk array accessible from all computers in the Zilberman and Fischer laboratory.

4. Number of Fellows/Trainees to be Supervised During the Fellowship.

In addition to Christian Ibarra, the Sponsor (Fischer) and Co-Sponsor each supervise one predoctoral and two postdoctoral trainees.

5. Applicant’s Qualifications and Potential for a Research Career

Christian Ibarra has been a graduate student in Robert Fischer’s laboratory for over two years. His main interest has been to understand how gene imprinting is regulated by DME-mediated DNA demethylation. Christian uniquely tackled the problem on a genome-wide basis. He was a catalyst for the collaboration between my lab and Daniel Zilberman’s lab. Christian is thriving in this collaborative research environment. He spends long hours thinking about his research, and extensively consults with Daniel Zilberman and me, as well as graduate students and postdoctoral fellows in both labs. Christian has an exceptional understanding of the principles of molecular biology and genetics. He is very intelligent and enjoys reading the current scientific literature. He asks many penetrating questions and is highly motivated to advance his research project. He works long hours in the lab and diligently studies for his classes. Christian develops, expresses, and tests his own hypotheses about his research. He is well organized and carefully plans his research and study time. Christian Ibarra is also highly motivated to teach. He gives well-organized and interesting seminars at our laboratory meetings. On his own volition, he has arranged to give presentations to high school students, particular to students who are underrepresented minorities in the sciences. In summary, I give Christian Ibarra my highest recommendation for an NIH predoctoral fellowship. He is comparable to the best graduate students who have worked in my lab these past 20 years. I am sure he will develop an exciting research program, be an inspirational teacher, will graduate with distinction, and will go on to generate his own successful career in research.
Examples of Sponsor Plans

Boston University--
www.bumc.bu.edu/gms/files/2015/12/Sponsor-Plan-Template.docx

Univ. Pittsburgh https://www.pitt.edu/~gsiegle/Siegle-f31hints-BehaviorTherapist10_fordistrib.pdf

Sample F31 on GW website(U Berkeley)
https://smhs.gwu.edu/ibs/sites/ibs/files/F31%20Sample%20Application%206.pdf
Review Criteria

Sponsors, Collaborators, and Consultants

- Are the sponsor(s’) research qualifications (including recent publications) and track record of mentoring individuals at a similar stage appropriate for the needs of the applicant? [similar any collaborators/consultants]
- Is there evidence of adequate research funds to support the applicant’s proposed research project and training?
- Is there evidence of a match between the research and clinical interests (if applicable) of the applicant and the sponsor(s)? Do(es) the sponsor(s) demonstrate an understanding of the applicant’s training needs as well as the ability and commitment to assist in meeting these needs?
- If a team of sponsors is proposed, is the team structure well justified for the mentored training plan, and are the roles of the individual members appropriate and clearly defined?
Next steps: IBS Qualifier Exam

### NIH submission

<table>
<thead>
<tr>
<th>DATE/DEADLINE</th>
<th>OBJECTIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>January-February</td>
<td>Orientation of students to qualifier &amp; discussion of hypothesis and aims with advisor</td>
</tr>
<tr>
<td>March-April</td>
<td>Selection and Approval of Qualifying Committee members</td>
</tr>
<tr>
<td>June 1</td>
<td>Specific aims submitted to Qualifying Committee members</td>
</tr>
<tr>
<td>June-July</td>
<td>Approved aims used to develop full proposal (5 week writing period)</td>
</tr>
<tr>
<td>July 20 (latest)</td>
<td>Student submits written proposal to Qualifying Committee</td>
</tr>
<tr>
<td>August 5 (latest)</td>
<td>Oral defense of proposal</td>
</tr>
<tr>
<td>September 15* (latest)</td>
<td>Qualifying Committee returns any comments to student</td>
</tr>
</tbody>
</table>

### Specific Aims Page
- Approval within two weeks of submission
- Approval within two weeks

### Written Proposal
- Due 5 weeks after approval of Specific Aims
- Approval within two weeks

### Oral Defense
- Within one month of Written Proposal approval
- Before November 1st
- Re-defense within one month of oral defense

<table>
<thead>
<tr>
<th>PhD Qualifying Committee</th>
<th>Final Approval Signature</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Committee Chair</td>
<td></td>
</tr>
<tr>
<td>2. Committee Member</td>
<td></td>
</tr>
<tr>
<td>3. Committee Member</td>
<td></td>
</tr>
<tr>
<td>4. Research Advisor, non-voting</td>
<td></td>
</tr>
<tr>
<td>5. Research Co-Advisor, non-voting</td>
<td></td>
</tr>
</tbody>
</table>